



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/798,366

03/12/2004

Stanislav M. Snair

000417.00018

6070

22907 7590 09/22/2009

BANNER & WITCOFF, LTD.

1100 13th STREET, N.W.

SUITE 1200

WASHINGTON, DC 20005-4051

EXAMINER

LOPEZ, CARLOS N

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

09/22/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/798,366	Applicant(s) SNAIDR ET AL.	
	Examiner CARLOS LOPEZ	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) 24-44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-23,45 and 46 is/are rejected.
- 7) ☒ Claim(s) 2 and 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Snaidr et al WO 98/16125. Claim 29 discloses a porous tubular element comprising cerium oxide. The tubular element encases a tobacco charge, which is deemed as the claimed tobacco rod. Additionally as shown in figure 1 of '125 the tobacco rod is wrapped by both a cigarette paper and a tube comprised of the treatment material. Hence, the wrapper of '125 cigarette comprises both combustible and noncombustible portions. Therefore, in view that the claim only requires that the wrapper be combustible without defining the extent the wrapper is combustible it is deemed that the wrapper system of '125 having both combustible and noncombustible portions reads on the limitation of instant claim 1.

Claims 1,4-7, 12-14,17-18, 20-21, and 45-46 are rejected under 35 U.S.C. 102(e) as being anticipated by Bowen et al US 6,286,516 or alternatively under 35 U.S.C. 102(a) as being anticipated by Bowen et al WO 99/53778. '516 reference will be cited in the instant rejection. Bowen discloses a cigarette side-stream smoke treatment

Art Unit: 1791

material. The treatment material may be wrapped over and be in substantial contact with a cigarette (Col. 5, lines 15ff). The treatment material is comprised of a first component comprising a porous non-combustible material, see Col. 4, lines 1ff, which as noted in col. 7 lines 5ff and in column 8, lines 45ff is a sorbitive material such as zeolites. The second component of the treatment material is incorporated in the first component, see Col 4, lines 1ff, for which it is an oxygen storage component such as cerium oxide, see Col. 7, lines 40ff. As noted in Col. 7, lines 33ff, the cerium oxide is in situ or applied to the surface of the zeolite. Hence, the claimed porous material having cerium oxide is anticipated by Bowen et al.

Additionally as shown in figure 1 of '516 the tobacco rod is wrapped by both a cigarette paper and a tube comprised of the treatment material. Hence, the wrapper of '516 cigarette comprises both combustible and noncombustible portions. Therefore, in view that the claim only requires that the wrapper be combustible without defining the extent the wrapper is combustible it is deemed that the wrapper system of '516 having both combustible and noncombustible portions reads on the limitation of instant claim 1.

In addition to the first and second components, a catalyst is added to the treatment material selected, among other things from rare earth metals oxides, platinum oxides, and transition metal oxides, see Col. 8, lines 34ff, hence reading on claims 6-7, 17-18, 21.

As for claim 12 and 20, Col. 6, lines 45ff provides that the treatment material may be provided onto the surface of a cigarette. In view that a cigarette is wrapped in a

paper wrapper, the addition of the treatment material onto the paper wrapper would result in the claimed limitation as recited in claim 12.

As for claims 14, the cerium oxide is in situ or applied to the surface of the zeolite, see Col. 7, lines 33ff.

As for claim 5, applying to the surface of the zeolite as noted in above, inherently creates a layer of the cerium oxide.

As for claim 45-46, Column 4, lines 7ff of Bowen notes that the oxygen storage component releases oxygen at temperature of 300⁰C, wherein the free burn rate temperature of the cigarette ranges from 400⁰C -900⁰C as noted in Col. 13, lines 50ff.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowen et al WO 99/53778 ('778) in view of Schlatter et al (US 5,040,551). As noted in page 13 of '778, catalyst material may be added to the oxygen storage material and treatment material (zeolite). '778 further notes that catalyst is used to promote various reactions and may be transition metal oxides. '778 is silent disclosing Iron oxide as a transition metal oxide. However, Schlatter, at Col. 4, lines 16ff, teaches of using Iron oxide to reduce carbon monoxide in cigarette smoke. Hence, at the time the invention was made it would have been obvious to a person of ordinary skill in the art to

Art Unit: 1791

have used iron oxide as '778's catalyst as taught by Schaltter in order to reduce carbon monoxide in cigarette smoke.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bowen et al WO 99/53778 ('778). Bowen is silent disclosing the loading rate of the cerium oxide. However, it does note that cerium oxide is used to ensure that the conventional free burn rate of tobacco is maintained, a showing of a result effective variable. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to have conducted routine experimentation on the amount of cerium oxide in order to provide burn rates of conventional cigarettes. An optimum amount of cerium oxide would be obvious to be determined in order to assure that an overload of cerium oxide does not decrease the number of puff a cigarette can provide due to an increase oxygen release.

Claims 10-11, 15-16, 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowen et al WO 99/53778 ('778) in view of Grodek (US 5,004, 711). As noted above, Bowen teaches of using sorbitive material using a zeolite that may provide a dual purpose, sorbent material and catalyst material. '778 is silent disclosing other types of sorbent material. However, Grodek teaches that zirconium oxide is an adsorbent (Col. 11, lines 55) that can be used in cigarettes to filter smoke. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to have used other known sorbent material such zirconium oxide as taught by Grodek, as the sorbent material for '778, in order to provide alternate sources of sorbent material.

As for claims 22-23, Bowen notes of using other catalyst such as transition metal oxides, which encompasses the claimed zirconium oxide, see page 14, lines 5ff, when mixed with the cerium oxide and zeolite the above noted treatment material meets the claimed invention as recited in claims 22- 23.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1,12,20, and 45-46 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 5 and 13 of U.S. Patent No. 6,286,516('516). Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 5 and 13 of '516 discloses a cigarette comprised of a cerium oxide provided on a non-combustible porous particulate. As noted in claim 1 '516 the tobacco rod is wrapped by both a cigarette

paper and a tube comprised of the treatment material. Hence, the wrapper of the '516 cigarette comprises both combustible and noncombustible portions. Therefore, in view that the claim only requires that the wrapper be combustible without defining the extent the wrapper is combustible it is deemed that the wrapper system of '516 having both combustible and noncombustible portions reads on the limitation of instant claim 1.

As for claims 45-46, in view that claims 5 and 13 provides for the claimed porous particulate adjunct and the claimed cerium oxide, it would be obvious to a person of ordinary skill in the art to have expected the catalyst to release oxygen at free burn rate temperatures of the cigarette.

Response to Arguments

Applicant's arguments filed 6/4/09 has been fully considered but are deemed as not persuasive.

As noted in the previous office action claim 1 only provides for a wrapper to be combustible and that the wrapper comprise porous particulate cerium oxide but the claim does not require that the wrapper be 100% combustible (especially since the wrapper comprises cerium oxide an un-combustible material)¹.

Applicant's specification provides for a "combustible" wrapper by making a slurry film comprising the cerium composition. The film is "dried to provide a coating on the paper 10"; the paper 10 being a cigarette wrapper. Hence, as one can see the wrapper of the claimed invention may read on a two component "system" because the

¹ according to applicant's definition that it does not combust while the cigarette is smoked

specification explicit provides for a paper wrapper to be coated with a film comprising the cerium oxide.

Furthermore, the specification at page 18 provides for sandwiching “the treatment composition between paper layers to form a double cigarette paper wrap on tobacco rods.” This clearly shows that the wrapper as claimed by applicant may constitute a “system”; which is no different than the system of ‘125 providing a cerium oxide tube wrapped by a paper wrapper to be used as a cigarette wrapper. Hence the argument that the prior art wrapper of ‘125 does not read on the claimed invention because wrapper ‘125 is a “system” is not found persuasive. In conclusion reading the phrase “wrapper” in the instant claims does not exclude the use of multi-layered wrappers such as ‘125.

In view of this reasonable interpretation of claim 1, based on applicant specification on how the word wrapper is used, the wrapper of ‘125 reads on the claimed invention.

In regards to the argument in bridging paragraph of pages 19-20, the claim does not exclude the “decoupling.”

In regards to the argument in the remark section page 20 noting that the claimed cigarette provides “very little side stream smoke”, said distinction is not recited in the claimed invention. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In regards to the argument presented in bridging paragraph of pages 20-21, that cited art "does not contemplate that side-stream smoke control can be realized..." said feature is also not recited in the claim language.

In the bridging paragraph of page 21-22, and paragraph in page 22 applicant argues that Bowen fails to disclosed the claimed invention because Bowen's " tube does not comprise an oxygen storage and donor metal oxide oxidation catalyst *and* an essentially non-combustible finely divided porous particulate adjunct for the catalyst...This cited document does not contemplate that sidestream smoke control can be realized by combined use of an oxygen storage and donor metal oxide (e.g. rare earth metal oxide) in combination with a porous adjunct to reduce sidestream smoke, as set forth in the pending claims. This use in combination is not realized in the cited document."

As noted above, In addition to the first and second components, a catalyst is added to the treatment material selected, among other things from rare earth metals oxides, platinum oxides, and transition metal oxides, see Col. 8,lines 34ff, hence reading on claims 6-7, 17-18, 21. Additionally as noted above, Bowen at Column 4, lines 7ff of it notes that the oxygen storage component releases oxygen at temperature of 300⁰C, wherein the free burn rate temperature of the cigarette ranges from 400⁰C - 900⁰C as noted in Col. 13, lines 50ff. which shows that there is an oxygen storage component.

As for applicant's argument that Bowen does not disclose sidestream smoke reduction, said limitation is not recited in the claim.

In regards to Applicant's arguments against the 103 rejections citing Schaltter and Grodek and the Bowen double patent rejection, Applicant's arguments fails to comply with 37 CFR 1.111(b) because they amount to a general allegation that the

Art Unit: 1791

claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Furthermore, applicant is arguing against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In conclusion Applicant's main argument that the invention is mischaracterized is found unpersuasive. As noted above, the specification provides that a wrapper may be formed by layers of cerium oxide sandwiched between paper layers or coating the cerium oxide onto the paper. Hence, it is reasonable to define the word "wrapper" as used in the claim as comprising a "system" having a cerium oxide component and a paper component.

It is agreed that the specification provides for cerium oxide being supplied to a paper furnish that is later formed into a paper wrapper. However, the Examiner would not be providing a broad reasonable interpretation of the phrase "wrapper" by narrowly reading said phrase to mean a wrapper resulting from a paper furnish supplied with cerium oxide. Based on how the specification uses the phrase "wrapper" it would be a reasonable interpretation to define the phrase wrapper as including a two layered wrapping system.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CARLOS LOPEZ whose telephone number is (571)272-1193. The examiner can normally be reached on Mon.-Fri. 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571.272.1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1791

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Carlos Lopez/
Primary Examiner
Art Unit 1791

CL